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EXAMINER

IZAGUIRRE, ISMAEL

ART UNIT PAPER NUMBER

3765

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/774,035

Applicant(s)

PRICE ET AL.

Examiner

Ismael Izaguirre

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 and 27-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-25, 27 and 29-35 is/are rejected.
- 7) ☒ Claim(s) 7 and 28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/23/04; 2/18/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: & IDS of 11/9/05; 1/9/06.

DETAILED ACTION

CLAIMS

Summary

Claims 1,11,25,34 and 35 are the independent claims under consideration in this Office Action.

Claims 2-10,12-24 and 27-33 are the dependent claims under consideration in this Office Action.

Claim Rejections - 35 U.S.C. § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 20 and 30 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Referring to claim 20, line 2, there is no proper antecedent basis for the words "said tension element".

Referring to claim 30, lines 2-3, there is no proper antecedent basis for the words "the pre-feed rolls"

Claim Rejections - 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1,5,6,25,27,34 and 35 are rejected under 35 U.S.C. § 102(e) as being anticipated by Freeman et al. (6,574,815).

Freeman et al. teach an apparatus and method for finishing an attachment gusset for a mattress. Freeman et al. teach feeding a length of gusset material 18 from a supply 60 and feeding the gusset material through a folder 62 having guide plates 64 to a sewing machine 74 having a sewing needle. The gusset material is fed after the folder onto a support 66 and past a pleating means 73, which includes a blade, or knife, which moves to and fro for forming ruffles at the corners of the mattress. The gusset material is sewn at a desired location from the edge of the mattress panel 12 using the sewing needle 72 and tensioned by a tensioning element 80 and 90 which pulls or drags and clamps onto the materials. The materials are tensioned while fed through the sewing area along a straight line and as the materials turn a corner, the gusset is ruffled enough to provide a cupping characteristic at the corners of the mattress. The blade 73 is moved back and forth for forming a series of ruffles as it is sewn onto the panel

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material and then after all four corners are sewn then at the last straight line the material is cut folded and the trailing end is sewn to the original lead end (from column 5, lines 7-9).

Claims 1,4,8-11,15-17,19-22,25,27 and 31-35 are rejected under 35 U.S.C.

§ 102(e) as being anticipated by Marcangelo (6,889,622).

Marcangelo teaches an apparatus and method for finishing an attachment gusset for a mattress. Marcangelo teaches feeding a length of gusset material 150 from a supply source and feeding the gusset material through a folder 148 to a sewing machine 22 having a sewing needle 28 and a presser foot 26 and corresponding feed dogs which apply tension to the materials being sewn. Prior to feeding the gusset material to the sewing machine, Marcangelo teaches providing a pre-flanging station where a flange material is stitched to the gusset material (from column 1, lines 55-60). The gusset material is fed from the folder onto a support and past a pleating means 34, which includes a blade or knife, which moves to and fro for forming ruffles at the corners of the mattress. The gusset material is sewn at a desired location from the edge of the mattress panel 141 or 186 using the adjustable folder, which includes a guide 156 adjustable, by a set screw at 172 (from column 7, lines 1-13. The ruffler and the folder are attached to a movable arm which pivots the folder and ruffler toward the sewing position and away therefrom when not in use (figure 3, for example). The ruffler blade is moved back and forth by an actuator 127 for forming a series of ruffles as the gusset is sewn onto the panel material and then after all four corners are sewn then at the last

straight line the material is cut folded and the trailing end is sewn to the original lead end (from column 9, lines 23-25).

Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2,3,29 and 30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Freeman et al. in view of Eto (5,560,308).

Freeman et al. disclose the invention substantially as claimed. See above for specific explanations of the structural details of this document. Briefly, Freeman et al. teach a method and apparatus for attaching a gusset to a panel in the manufacture of a mattress. The gusset material is provided from a source and fed to a folding and ruffling mechanism and then to a sewing machine. The gusset is sewn to the panel of the mattress and pulled along or fed by a transporter 80 as the gusset is being sewn. However, Freeman et al. do not suggest the gusset being fed or pulled from the source by a series of pre-feed rolls.

Eto teaches an apparatus and method for manufacturing a mattress and sewing a tape or selvage to a panel for forming part of a mattress. The tape material is fed by using a series of rollers 50a and 50b before it is fed to a sewing machine. A servomotor

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and a control means are provided for controlling the amount and speed and actuation of the rollers (column 6, lines 12-33).

It would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to construct the apparatus of Freeman et al. as including a series of pre-feed rollers for feeding the gusset to the sewing machine. Providing such an arrangement would allow the controlled positive feed of the gusset to the sewing machine and thus would avoid slacking and bunching of the gusset where not desired.

Claims 12-14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Marcangelo in view of Frey et al. (4,903,622).

Marcangelo discloses the invention substantially as claimed. See above for specific explanations of the structural details of this document. Briefly, Marcangelo teaches an apparatus and method for finishing an attachment gusset for a mattress. Marcangelo teaches feeding a length of gusset material 150 from a supply source and feeding the gusset material through a folder 148 to a sewing machine 22 having a sewing needle 28. The gusset material is sewn at a desired location from the edge of the mattress panel 141 or 186 using the adjustable folder, which includes a guide 156 adjustable, by a setscrew at 172 (from column 7, lines 1-13. However, Marcangelo does not suggest the folder as including a series of folder plates where there is at least one movable plate between the plates movable for adjustment of the folding space of the folder.

Frey et al. teach an apparatus for feeding a strip of material to a sewing machine. The folder 1 includes plates 8 and 3 which are in facing relationship to each other and

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further include another plate 33 which is located between the plates and movable for adjustment of the spacing between plate walls in order to adjust the amount of space between the plates and a tension provided onto the strip being fed therethrough.

It would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to construct the folding apparatus of Marcangelo as including a movable/ adjustable plate between the feeder plates of the folder. Providing such an arrangement would allow the more positive alignment, positioning and tensioning of the material being fed through the folder of Marcangelo.

Claim 18 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Marcangelo in view of Ferguson (5,029,542).

Marcangelo discloses the invention substantially as claimed. See above for specific explanations of the structural details of this document. Briefly, Marcangelo teaches an apparatus and method for finishing an attachment gusset for a mattress. Marcangelo teaches feeding a length of gusset material 150 from a supply source and feeding the gusset material through a folder 148 to a sewing machine 22 having a sewing needle 28. The gusset material is fed from the folder onto a support and past a pleating means 34, which includes a blade or knife, which moves to and fro for forming ruffles at the corners of the mattress. However, Marcangelo does not suggest the ruffler blade as being movable by using an air.

Ferguson teaches a sewing machine arrangement including a ruffling or tucking attachment. The ruffler includes a blade 14, which moves to and fro for forming the

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ruffles, which are fed to the sewing machine and sewn. Further, Ferguson teaches air cylinders 24, 35 for moving the ruffler blade toward and away from the sewing machine.

It would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to construct the pleating apparatus of Marcangelo as including an air cylinder arrangement for actuating and moving the ruffler blade. Providing such a drive would allow the smooth and positive movement of the ruffler when forming the ruffles.

Claims 23 and 24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Marcangelo in view of Eto (5,560,308).

Marcangelo discloses the invention substantially as claimed. See above for specific explanations of the structural details of this document. Briefly, Marcangelo teaches an apparatus and method for finishing an attachment gusset for a mattress. Marcangelo teaches feeding a length of gusset material 150 from a supply source and feeding the gusset material through a folder 148 to a sewing machine 22 having a sewing needle 28. However, Marcangelo does not suggest the gusset material being fed or pulled from the source by a series of pre-feed rolls.

Eto teaches an apparatus and method for manufacturing a mattress and sewing a tape or selvage to a panel for forming part of a mattress. The tape material is fed by using a series of rollers 50a and 50b before it is fed to a sewing machine. A servomotor and a control means are provided for controlling the amount and speed and actuation of the rollers (column 6, lines 12-33).

It would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to construct the apparatus of Freeman et al. as including a series of pre-feed rollers for feeding the gusset to the sewing machine. Providing such an arrangement would allow the controlled positive feed of the gusset to the sewing machine and thus would avoid slacking and bunching of the gusset where not desired.

ALLOWABLE SUBJECT MATTER

Claims 7 and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

PERTINENT CITATIONS

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fieschi illustrates a folded tape feeder 11, which is pivotable using an air cylinder.

INQUIRIES

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ismael Izaguirre whose telephone number is (571) 272-4987. The examiner can normally be reached on M-F (8:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Calvert can be reached on (571) 272-4983. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ismael Izaguirre
Primary Examiner
Art Unit 3765

II

2/1/06